

that this form inhabits India and is also found in Borneo and New Guinea. Specimens with larger dimensions from India are apparently migrants from the north, but in view of the great individual variation in size of these Little Plovers, one cannot always be sure about single winter birds from tropical India.

vi. *On TRINGA OCHROPUS.*

It has recently been suggested that the eastern and western forms of the Green Sandpiper are separable, the latter being lighter and smaller. We cannot confirm this; neither can we see the slightest difference in colour, nor is the supposed eastern form larger; on the contrary, we find more large specimens among western birds—apart from a giant from the Amambara Creek, Niger, W. Africa—than among the eastern ones, but the majority show the same dimensions.

We must therefore regard *Tringa ochropus assami* Mathews (Austral. Av. Rec. i. p. 188, 1913, Assam, and B. Austr. iii. p. 203) as a synonym of *T. ochropus*.

XXVI.—*Notes on the Ornithology of the Matopo District, Southern Rhodesia.* Part II.* By L. BERESFORD MOURITZ, M.B.O.U., M.S.A.O.U.

(Text-figure 8.)

118. ‡ *Riparia cincta*. Banded Sand-Martin.

An uncommon summer visitor, and very local in its distribution. I first met with this Sand-Martin in the district on November 30, 1910, when four or five were flitting about some old shafts and trenches between the Northern Star and Kimono Mines. In 1912 I saw one, flying in company with two Rufous-breasted Swallows, close to the Terminus Hotel, on January 21, and again met with it in this locality on March 10, whilst at the end of January I met with the species again on Lucydale farm. These

* For Part I. see 'Ibis,' 1915. pp. 185-216.

latter birds I had under observation throughout February and March, and have no doubt they nested in the vicinity. One was invariably to be found perched on a bare thorn-bush close to a sandy patch, where there were innumerable springhaas' and ant-bears' holes. I think this bird must have been a male watching over his sitting mate, but in spite of very careful searchings and continual watching, the bird refused to give away the site of its nest. It would simply flit lazily about, to and fro, uttering very occasionally a soft "zwit" and returning promptly each time to its perch upon my retreat. The latest date which I have of this migrant's occurrence is April 27, when I noticed a small party, including two or three *Hirundo puella*, flying in a north-westerly direction at sunset.

119. *Riparia fuligula anderssoni*. Damaraland Rock-Martin.

Ptyonoprogne anderssoni (Sharpe & Wyatt); *Scl.* ii. p. 288.

Within the hills, common in certain localities and often breeding in large colonies; also sometimes found in lesser numbers in more or less isolated spots. Only occurring to my knowledge at Matjanyoni and the contiguous kopjes on the surrounding veld. Whether it is a resident with us or not I am unable to say, but in 1912 I met with it from February to August; after the middle of June, however, their numbers appeared to be greatly diminished. At any rate, there is little doubt that it is subject to considerable local movement. The birds nesting beyond the hills proper (*e.g.*, the colony on La Concord farm) probably leave their exposed nesting localities to winter in the more sheltered valleys within the hills. According to my observations, by far the majority of the birds which nested around Matjanyoni left on or about March 24; although for two months afterwards there were a few stragglers there raising belated broods, but my notes from then until August are confined to the hills proper. Eventually, this Rock-Martin will probably prove to be found throughout the year in the

Matopos, as was noted to be the case in Damaraland by Andersson. A breeding female shot on the 7th of February was infested with small ticks on the crown, and, although referable to the present species (the underside immediately distinguishing it from the southern darker form), it differed materially from Sclater's description. The upperside was hardly "pale mouse-colour," but intermediate in this respect between *R. fuligula* and *R. anderssoni*. Another important difference was in the tail; the four centre rectrices and the two outermost were immaculate, leaving only six feathers with white on the inner webs. The under tail-coverts were darker than the breast and edged with greyish, and the longest reached within 3 mm. of the end of the central rectrices. Upper mandible black; lower black also, but lighter at the base; iris brown; legs and feet light brown. This specimen measured 121.5 mm. in length; wing 111.5; tail 50.25; tarsus 11.5, and culmen 7.

In the case of the nesting colony, on Matjanyoni kopje, visited in February, the nests seemed to be all placed in precipitous and inaccessible places. In one case they were situated on ledges of rock inside a large cavity; and in another, on a ledge beneath a huge mass of overhanging granite and above a steep wall of rock, whilst there were also nests in smaller cavities on the other side of the kopje. Nesting colonies within the hills are situated on Makalanyoni, Mshingili, Pomomwi, Inengwe Ranges, etc. During the nesting-season these Martins seem to hang around their chosen spots very much, and may be seen flying round and round, up and down and over the kopje (in well-defined routes), snapping up insect-life on their way; or they may be observed flitting lazily about higher in the air over the top of the kopje; at other times they love to rest secure in some small irregularity of surface on the faces of the larger masses of granite, basking in the rays of the rising or setting sun—every now and again taking a short circuitous flight only to return to the same spot. Later in the year this Martin frequents the streams more, and may often be noted over reaped and other lands.

120. ‡ *Hirundo griseopyga*. Grey-rumped Swallow.

I observed a pair of these rare Swallows on January 25, 1912, on Lucydale farm.

121. ‡ *Hirundo dimidiata*. Pearl-breasted Swallow.

The little Pearl-breasted Swallow is also rare; but I noticed it at Fortusher in 1908, at the World's View in June 1911, and twice in August 1912, on Mineral King farm and close to Bedza.

122. ‡ *Hirundo rustica*. European Swallow.

Sind. "nkonjani," a term also applicable to Bee-eaters, as well as other species of Swallows.

A very common summer visitor, which in 1912 occurred as late as April 24, when a small party journeying northwards passed over Lucydale. In February, there were movements going on amongst our Swallows. On the morning of the 7th, I noticed scores at dawn all perched on mealie stalks in an old cultivation, and, from their lassitude, evidently travellers—our full complement of birds being scattered about the country as usual. On the 21st, I noticed again several small parties of fifty or sixty which were evidently on migration. The main body of our local birds left for northern climes between the 12th and 15th of March.

123. ‡ *Hirundo cucullata*. Larger Stripe-breasted Swallow.

I noticed this large Swallow in January and March 1912 on Loñsdale farm, but later looked elsewhere for it in vain.

124. ‡ *Hirundo puella*. Smaller Stripe-breasted Swallow.

The peregrinations of this Swallow call for some comment. The Smaller Stripe-breasted Swallow is a migrant, which, after breeding with us in great numbers, departs towards the end of February, and although many remain after the main body have gone, these latter also appear to leave before the end of March. It would appear, however, that a few individuals must winter in specially sheltered spots, as the

promptitude with which this Swallow will appear in winter, directly we get some mild weather, is marvellous. The natives say that they hibernate in holes, but of course this cannot be taken seriously. The following excerpts from my 1912 diary bearing upon occurrences after the breeding season are of interest:—

- 4 March. Although the great majority have left, there are still a few remaining here and there.
- 28 „ Several still about.
- 31 „ One.
- 27 April. A small party of these Swallows and *Riparia cineta* flying N.W. at sunset.
- 2 June. A solitary one in Matondo's valley.
- 18 August. Solitary one flitting about lethargically on Makalanyoni.
- 22 „ A party of ten at Inengwe flying in company with two or three Rock-Martins. It is curious to remark the sudden advent of these Swallows directly the hot weather starts
- 28 „ A pair round Inungu.
- 1 Sept. Two close to the Terminus Hotel.
- 3 „ Two round Njongi, flitting lazily about.

Unfortunately I left the district three days later; but there seems little doubt that the concluding notes herald the arrival of the breeding birds. In the nesting season this Swallow is practically confined to the kopje-country, and therein they affix their tunnel-entranced, mud-constructed nests to some overhanging rock or to the roof of a cave. Usually gregarious, single pairs not infrequently nest away from the main bodies, and I have found solitary nests in most unexpected places—in fact, practically anywhere, from the top of a kopje to its base, some being placed out of reach, whilst others were only a few inches or feet from the ground. The main bodies, however, almost invariably nest in inaccessible situations. The nest itself, in addition to its smaller size, may readily be distinguished from that of *H. cucullata* by the diminutiveness of the “dagga” pellets, and the consequent smoother general appearance. In common with those of its congeners, the nests are lined with feathers. The inaccessibility of the nesting-sites

favoured by this Swallow ensure successful rearing of broods, and the number of young and old birds ready for migration in February is astounding. On such occasions I have noticed many *H. rustica* flying in their company, but observed that, whereas on resting, these resorted to trees, *H. puella* evidently preferred rocks.

125. *Hirundo semirufa*. Rufous-breasted Swallow.

The Red-breasted Swallow, unlike the last species, prefers the open country to the hills, and is a plentiful summer visitor with us. I noticed it on November 30, 1910, August 6, 1911, and from January 16 to May 27, 1912. The migrations of this Swallow seem to coincide with those of *H. puella*, and one has the same difficulty in accounting for their appearances during the dry season. In 1912, the majority left on or about February 28, but there were stragglers present up to the 29th of the following month, and I even took fresh eggs as late as the 1st of March. The occurrence of one at Bedza in May was exceptional. I found no less than seven nests of this Swallow, and all were in ant-bears' holes. The following are the data:—

Locality: Lucydale farm.	Alt. 4350 feet.
8 February, 1912. c/3	Incubation advanced.
9 " c/3	Ditto.
11 " c/3	Fresh.
15 " c/3	Hatched.
16 " c/3	Fresh.
20 " c/3	Incubation very advanced.
1 March, 1912. c/2	Fresh. (2nd laying.)

The eggs were in every case pure white, and showed a minimum length of 22×16.5 mm. and a maximum of 24.5×15.5 mm. over the series.

The nest of this Swallow is attached to the roof of the hole, and is usually beyond reaching distance from the surface—every nest which I found had to be dug out. Although the nest is usually attached to a flat surface, it is nevertheless built to fit inequalities upon occasion. A nest

which I measured up, gave the following dimensions and weighed several pounds :—

	inches.
Length over all	16
Entrance neck, inside	$1\frac{1}{2} \times 1\frac{1}{4}$
" " above, length	$5\frac{1}{2}$
" " below, "	$3\frac{1}{2}$
Bottom of entrance neck to roof of hole	$3\frac{1}{2}$
Average thickness of the clay	$1\frac{1}{2}$
Except that of the neck, which was	$\frac{3}{4}$
And that of the nest bottom, which was . .	1
Greatest thickness of clay (at entrance rear of nest)	3
Distance from surface to entrance of nest	36

These particulars give some idea of the birds' industry. Amongst the clay there were numerous small bits of stone, and a lot of silicious black "dagga." The entrance neck was stained throughout with the birds' droppings, and the nest itself was very dirty beneath the feather lining—this is confined to the rear half of the chamber, the bare space in front probably being used for roosting purposes by one of the birds. Right at the bottom of the nest, between the feather lining and clay shell, a few strips of coarse grass are usually laid. On the 25th of January I shot a female, dug up and destroyed a nest close to the river, but found it incomplete, the birds being still engaged in the finishing touches of the feather lining. On March 1, I noticed Swallows at this hole again, and found a new nest built and two eggs already laid. The surviving cock had evidently procured another mate, and the birds had built the second nest just behind the remains of the destroyed one. From this I deduce that the male Swallow is responsible for the selection of the nesting site. I watched these birds some time before approaching the nest, and noticed that when not seeking food, the cock spends a lot of time perched on a convenient spray, twitting to his sitting mate. Later, both birds went off together, but soon returned, bringing feathers to add to the lining; and this I noticed with other pairs, they

evidently like to add fresh supplies as the original becomes dirty and downtrodden. On arriving at their particular hole, only one of the Swallows will enter at the time, and it is pretty to watch the other remaining with flapping, quivering wings overhead, and keeping almost stationary even against a strong wind.

If intruded upon at this juncture, the watchful bird will utter a querulous alarm-note (totally different from their usual twittering), but as a rule the bird below will remain sitting. Generally speaking, especially after the young have flown, *Hirundo semirufa* is more sluggish than the majority of Swallows, and is usually to be found in pairs, keeping much to themselves (a trait also shared by *H. cucullata*), except perhaps sometimes in the evening, when couples may occasionally be found congregated at a termite-feast or the like. At other times, noticeably during the heat of the early afternoon, I have noticed them perched on a sprig of "mimosa"—often a long way from water—remaining perfectly quiet and still, beyond preening a refractory feather or two as occasion demands. A female shot on February 8 measured 203 mm.; wing 123, tail 118, tarsus 15, and culmen 16 mm. Iris dusky brown; bill black; legs and feet dark lilac-brown. The four centre rectrices were immaculate, leaving only eight with the large white spots on the inner webs. Another female caught on the nest in February had the two centre rectrices only immaculate, the next two with very small white spots, and the rest with large spots. These variations are probably due to age, and the same may possibly be found to be the case also with *Riparia fuligula anderssoni* (*vide supra*).

126. † *Delichon urbica*. House-Martin.

Chelidon urbica (Linn.); *Scl.* ii. p. 278.

The House-Martin occurs on its migrations, but I have only notes of its occurrence from March 12 to April 2. On one occasion I saw several in company with many *Hirundo rustica* and *Riparia cincta*.

127. *Bradornis pallidus murinus*. Mouse-coloured Flycatcher.

Bradyornis murinus Finsch & Hartl.; *Scl.* ii. p. 239.

Uncommon; and, I think, more often seen during the cold months than at any other time.

128. *Bradornis griseus*. Reichenow's Flycatcher.

There is a specimen in the Albany Museum collected by R. Williams in the Matopos (*Annals Transvaal Mus.* vol. ii. 1910, p. 150).

129. *Sigelus silens*. Fiscal Flycatcher.

Tarsiger silens (Shaw); *Scl.* ii. p. 219.

This species is a rare bird with us, but I have seen or procured specimens at Pomomwi, Njonga, Situku, and Gwenu ranges within the hills, and it is probable that it will eventually be found in other localities.

130. † *Muscicapa grisola*. Spotted Flycatcher.

This migrant from Europe is an uncommon summer visitor with us.

131. *Hyliota rhodesiæ*. Rhodesia Flycatcher.

Hyliota rhodesiæ Haagner, *Journ. S. Afr. Orn. Union*, vi. 1910, p. 14.

The type from the Matopos is in the Albany Museum, and was collected by R. Williams.

This Flycatcher has the distinct characteristic of a broad white bar across the outer tail-feathers (*Annals Transvaal Mus.* vol. ii. 1910, p. 150).

132. *Batis* sp.

On June 24, 1912, and subsequently I met with a species of this genus which at first sight appeared, on account of its rufous flanks and wing-coverts, referable to the Cape bird—*B. capensis*. It was, however, considerably smaller than the common *B. molitor*; because of this, and also on account of its orange-red irides, I am led to believe that it may eventually prove to be identical with Mr. Swynnerton's *B. erythrophthalma* (*Ibis*, 1908, p. 93.) These Flycatchers

used to frequent daily a large "umkuna" which was growing at the entrance of our cave, and were always very tame.

133. ‡ *Batis molitor*. White-flanked Flycatcher.

Pachyprora molitor (Hahn & Küst.) ; *Scl.* ii. p. 255.

A more or less common species throughout the district.

134. ‡ *Campephaga nigra*. Black Cuckoo-Shrike.

The Black Cuckoo-Shrike is but seldom seen, but I noticed an individual on September 1, which at first I mistook for *Dicrurus ludwigi* ; but the extreme squareness of the tail, different note, and unapproachable manner at length led to its correct identification.

135. ‡ *Prionops talacoma*. South African Helmet-Shrike.

Fairly common, but hardly numerous. These peculiar birds procure a considerable amount of their food on the ground, but when flushed, invariably resort to trees with a soft "clicking" sound—evidently produced by the mandibles. At other times they may be found fluttering through the scrub from bush to bush, and allowing a close approach. In the evening, however, they resort to the larger timber, and I have found them roosting in such trees as the "umkamba," "umpumpu," "umngawe," etc. I once noticed a party of seven in open grassland flying a yard or so, settling for a few seconds, flying forward again, and they repeated these curious gambols for some hundreds of yards.

136. *Sigmodus retzii*. Black Helmet-Shrike.

The Black Helmet-Shrike is not uncommon, but never occurs other than in small parties of four or five, and the species is practically confined to the hills. These birds are much shyer than *Prionops*, and are not readily noticeable during the summer months on account of the screening foliage, but from May onwards they are more in evidence.

137. ‡ *Nilaus brubru*. Brubru Bush-Shrike.

Uncommon and somewhat local. I noticed several in June 1912 ; I also saw one close to Fortusher in 1908.

138. ‡ *Pomatorhynchus australis*. Three-streaked Bush-Shrike.

Telephonus australis (Smith); *Scl.* ii. p. 22.

Uncommon, except within the hills where it is more plentiful.

139. ‡ *Pomatorhynchus senegalus*. Black-crowned Bush-Shrike.

Telephonus senegalus (Linn.); *Scl.* ii. p. 19.

Sind. "umgabane" or "ukupane," also applied to the previous species.

More numerous within the hills than on the surrounding veld, and often found in kopjes: it also delights in frequenting the larger "dwalas." A male shot February 7 measured 223 mm. in length; wing 82.5, tail 113.5, tarsus 29, and culmen 20 mm. Irides light bluish-grey; bill blackish, merging into pale bluish-horn at tip and gonys; legs and feet bluish-grey.

140. *Chlorophonus* sp.

On several occasions in August 1912 I met with some Bush-Shrikes round the base of Mshingili and Mawa in "isiqwalapa," but I did not succeed in procuring a specimen. They were about seven or eight inches in length and were greenish-yellow above, including head and tail, and bright yellow below, merging into deep orange on the breast and throat. I noticed particularly that there was no yellow on the forehead. These Shrikes appeared to be *C. olivaceus* or a closely allied species; but the Olive Bush-Shrike, although recently recorded as far north as Chirinda in southern Melssetter by Mr. C. F. M. Swynnerton, has not yet been found at any distance westward.

141. *Laniarius major*. Large Puff-back Shrike.

Dryoscopus guttatus Hartl.; *Scl.* ii. p. 28.

These Shrikes are by no means rare birds within the hills, where they love to frequent such situations as the bush-covered banks of the Malemi River—below the Mshingili-Malamba Gorge. All the adult examples which I have examined have had the underparts well shaded with

pink. The varied notes of this bird, together with its better known "duet-calls," are among the more familiar of our avian sounds.

142. † *Laniarius atrococcineus*. Crimson-breasted Bush-Shrike.

Sind. "isikwe" (*vide post. Euplectes xanthometas*) or "ibilibomvu."

I have frequently heard of the occurrence of this Shrike, but have not noticed it personally. It will probably be found on the southern and western slopes of the hills if anywhere, as it is a common bird in the Mangwe district.

143. † *Malaconotus olivaceus starki*. Southern Grey-headed Bush-Shrike.

Laniarius starki Scl. ; Scl. ii. p. 41.

The "Spookvogel," as this Shrike is called by the Dutch, is a rare bird ; I have only noticed it close to the Terminus Hotel, June 11, 1911, and August 13, 1912.

144. † *Lanius collaris*. Fiscal Shrike.

Sind. "iquola."

Resident and not uncommon. I think this Shrike is, however, addicted to local movements at times. A nest found on the 26th of January contained three eggs of the closely-freckled pinkish type, which measured from 23 to 25 mm. in length, and 17.75 to 18.25 mm. in width. The pink ground-colour of these eggs, when fresh, soon fades to a buffy-cream colour. The site chosen was in a low stunted "ilipana" tree in open mimosa-strewn country, and was placed about three feet from the ground. The nest was a somewhat flimsy structure of various coarse grasses, lined with very fine grass, but "white-ants" had got into the structure, so that the eggs had been pushed up by their workings until the cup had almost disappeared. The female, as is the wont of this, at other times, bold bird, slunk off, dropping down the tree for about two feet, and then flying off low to perch in the top of a tree about sixty yards away, where it remained a long time before venturing back. The undulating flight of this Shrike is usually low, and only

from bush to bush, but occasionally I have noticed it mount up in the air to a considerable height. Drongos are arch-enemies of the Fiscal, and I have seen one steal an impaled caterpillar from a Shrike's larder; it was immediately given chase to, but, after dodging about through several trees, the Drongo succeeded in eluding further pursuit, whilst the Fiscal mounted up into the air to some height before returning to its perch on a neighbouring tree, where, with a good view over its remaining delicacies, it could incidentally regain its ruffled temper.

145. ‡ *Lanius minor*. Lesser Grey Shrike.

A summer visitor and not uncommon. Latest date on which seen, April 24.

146. ‡ *Lanius collurio*. Red-backed Shrike.

A numerous summer visitor, usually departing for northern climes about the middle of April, but in 1908 I noticed it at Fortusher as late as May 28.

147. ‡ *Urolestes melanoleucus*. Long-tailed Shrike.

Sind, "itjilobe."

I have not met with this Shrike personally, but am informed that it occurs in the mopani-tracts on the surrounding veld to the south.

148. *Corvus scapulatus*. Pied Crow.

Whilst at Fortusher I found this Crow present in small numbers between May and September, and I also noticed it in August 1911, but I do not appear to have any notes of its occurrence during 1912. The Pied Crow is addicted to local movements however, and, I think, the birds occurring in this district spend the greater part of the year around the abbatoirs and streets of Bulawayo.

149. *Heterocorax capensis*. African Rook.

Corvus capensis Licht. ; Sc. i. p. 14.

A not uncommon resident of the surrounding veld, but only occasionally seen within the hills, and then confining its attentions to the cultivated valleys. I have seen as many as twenty together in old mealie-lands, but it is usually seen only in threes or fours,

150. *Corvultur albicollis*. White-necked Raven.
Sind. "lihwabai" or "ingwababa."

The White-necked Raven is resident and common, and at the same time one of our most noticeable birds. Although usually found in pairs, it is often gregarious when feeding on a carcass or other food, whilst parties may sometimes be noticed flying at a good height towards sunset, evidently, from their direction, returning from feeding grounds beyond the hills—reminding one forcibly of Rooks coming home to roost in the Old Country.

This Raven spends a lot of its time early in the wet season, when the crops are sprouting, on the lands of the neighbouring farmers; but, although certainly guilty of some harm, it is not nearly so destructive in this respect as the francolins, ducks and doves, whilst it often mitigates its crimes by devouring countless grubs, harmful to the crops.

151. ‡ *Dicrurus afer*. Fork-tailed Drongo.
Sind. "sontengu" (Chubb).

This Drongo was quite numerous in the "isiqwalapa" around Fortusher from May to September 1908; but in 1912 I did not notice this usually plentiful species until after the middle of March. Later in the year however it was common enough within the hills.

152. ‡ *Oriolus notatus*. Andersson's Oriole.

This Oriole is a rare bird with us, and I have only seen it on one or two occasions during the wet season. It should be looked for in the larger timber, within the thick foliage of which it is an adept at hiding; it is very hard to observe satisfactorily.

153. ‡ *Oriolus larvatus*. Black-headed Oriole.

Rather common on the surrounding veld, but more plentiful in the hills.

154. *Creatophora carunculatus*. Wattled Starling.

Dilophus carunculatus (Gmel.); ScI. i. p. 23.

An immature specimen noticed on May 6, in company with the "Makwezi," *Lamprocolius sycobius*, on Vriegezicht farm is my only record.

155. † *Cinnyricinclus verreauxi*. Plum-coloured Starling.
Pholidanges leucogaster verreauxi Boc. ; ScI. i. p. 44.

A not uncommon visitor, departing for its nesting-grounds about the middle of May. The old birds are generally rather shy, but at the same time I have noticed them greedily devouring pepper-berries in the immediate vicinity of habitations. The sexes rarely consort together during their stay with us, although towards the end of March, or in the first week of April, those flocks which have not departed, appear to break up, and I think in many cases pairing takes place before they set out for their breeding haunts.

A young male shot on February 7 was in rather an interesting stage of transitional plumage. All but the first three primaries on each wing showed traces of metallic coloration; outer greater wing-coverts metallic throughout and the inner brown; median wing-coverts brown except where the moulted ones had given place to semi-grown metallic feathers; lesser wing-coverts mostly mottled except for a few on each wing; scapulars—some metallic on the left wing only; a patch of seven or eight metallic feathers on the back (where present in the adult female); two or three higher up at side; a good many metallic feathers amid upper tail-coverts; one of the centre rectrices wholly metallic; two or three metallic feathers on each side of the neck; one on the throat; several outer under wing-coverts metallic at bases and mottled brown and white at tips. On March 30, 1912, I shot a male in full plumage, which, in lacking the three-quarter white outer web to the outermost feathers of the tail, was evidently referable to the northern *Cinnyricinclus leucogaster*—not previously recorded from southern Africa.

156. † *Lamprocolius phœnicopterus bispecularis*. Lesser Red-shouldered Glossy Starling.

Common, and evidently resident.

157. † *Lamprocolius chalybeus sycobius*. Peters' Glossy Starling.

Lamprocolius sycobius Licht. ; ScI. i. p. 41.

Sind. "ikwezi," a term also applied to the last species.

Apparently resident and common, but owing to the similarity and consequent confusion between this and the last species, I have been unable to succeed in working out the correct status of either.

158. *Amydrus morio*. Red-winged Starling.

This Starling, although essentially a hill bird, invariably roosting therein, is constantly met with in foraging parties on the surrounding veld and foot-hills. These birds seem to feed principally in the early morning and late afternoon, and during the heat of the day are usually to be found round the higher kopjes, either perched on the top of a rock, or flying backwards and forwards in parties along the ranges, making the air ring with their peculiar musical whistle. The Red-winged Starling is a great pest where fruit is grown, but on the other hand devours large quantities of insects and their larvæ. For a nesting site, a small ledge or cranny on a krautz is chosen, and the eggs are therefore in many cases extremely hard to procure.

159. † *Sporopipes squamifrons*. Scaly-feathered Weaver.
Sind. "isoñhlaga."

Undoubtedly our commonest bird in the open veld, but not found within the hills proper, although it occasionally wanders into some of the valleys on the fringes. It delights in the thorn-veld however, and in many cases is so plentiful that dozens of nests may be found within a very small radius. This Weaver is undoubtedly double-brooded, and, roughly speaking, laying commences in October and continues until May, while the second brood starts in February. In 1912 large numbers had flocked by March 21, but many others were still tied down by the cares of nidification, and I noticed them collecting nesting material as late as the 12th of May. The height at which nests are placed varies considerably, but a site about five or six feet from the ground is chosen in most cases; exceptionally, however, nests may be found as high as twelve to fifteen feet and as low as a foot. The eggs vary considerably, from the faintly marked grey and greenish type to the dark

brown, whilst an unusual variety has the dark brown markings principally at the obtuse end—thus showing white ground-colour. Eggs in my possession measure from 17·75 × 11·50 mm. (17·50 × 12·00 mm.) to 15·0 × 11·25 mm.

Immediately previous to the flocking noticed in March, I found one or two nests containing young birds which had evidently been left to starve. The nestling is covered with greyish down.

160. ‡ *Anaplectes rubriceps*. Red-headed Weaver.

The Red-headed Weaver is decidedly uncommon, but nests in small numbers throughout the hills, and I have only seen it during the summer. The rough, and apparently loosely, but really strongly, constructed retort-shaped nests may be found suspended from some drooping twig of the majestic “unkamba,” or other large tree, but I have never seen more than two or three in any one locality. Occasionally, new nests are built on to the previous year’s habitation, but this is unusual. This Weaver, in company with the next, often breeds before attaining the adult plumage.

161. ‡ *Ploceus velatus*. Masked Weaver.

Hyphantornis velatus (Vicill.) ; ScI. i. p. 58.

Fairly common and presumably resident, but somewhat locally distributed. I found colonies in January and March (birds sitting) on the surrounding veld, while it must also nest within the hills.

162. ‡ *Pyromelana orix sundevalli*. Northern Red Bishop-Bird.

This is a plentiful breeding species in all localities suited to its habits. During a visit I made to the Dam in April 1911, I noticed that a large colony, which had built their nests amid the easily accessible bulrushes, had had them ransacked by native herd-boys, but, learning by experience, the birds had built their second nests in an aquatic plant growing in shallow water, which was at that time flowering, and I saw a lot of nests placed within a few inches of the water. On Lucydale I found these birds building “cock”

nests in January, but they set about serious business early in February, and on the 21st of that month I found a clutch of four eggs among the rushes overhanging the water. There were also several other nests in the vicinity. On the 29th I found another colony, which had built in rushes over a dried-up mud-hole at the head of a valley. These Finks are double-brooded, and the old nests are perhaps used by some of the first brood for roosting purposes, as I know they often stay in the neighbourhood whilst their parents are rearing their second brood, and, I fancy, not infrequently lend a hand in feeding them. The second-brood nests are placed close at hand. When one approaches a colony, all the birds (males first) get very excited and move off a few yards, but they soon return and show great uneasiness about their eggs. On one occasion, upon re-visiting a solitary nest—which I had noticed five days previously, containing two eggs—I found it deserted, and the eggs practically covered up with mud and little stones. Within a few yards the birds were busy with a fresh nest, which was, however, as yet in an unfinished state. On previous occasions I have noticed that both this species and *Euplectes xanthomelas* very quickly forsake their nest and eggs, if interfered with. The eggs vary considerably in size, and my series show a maximum of 22·50 mm. and a minimum of 17·25 mm. in length. Average width 14 mm. Typical nests are strongly constructed of coarse green grass lined with very fine grass, but very exceptionally, feathers are also utilized for this purpose. The nests are placed as a rule close to, or overhanging water, and are usually built in aquatic vegetation, but on one occasion I noticed an unfinished nest in a bush close to a dry watercourse running between a kopje and “dwala.” In 1912 I first noticed young birds hatched on March 29, and these showed white down on the neck, dorsal, and forearm tracts. The breeding plumage of the male begins to change in some cases by the 1st of April, but the majority are later. The Red Bishop-Birds, as well as the Black-thighed species, are very fond of green mealies and “amabele,” and I have noticed them, two or three on a cob at once, lustily pulling

and rending it to pieces, keeping up the while a constant chatter, and unless they are continually molested, they will carry their depredations to an incredible extent.

163. ‡ *Euplectes xanthomelas*. Black-thighed Bishop-Bird. *Pyromelana capensis xanthomelæna* (Rüpp.); ScI. i. p. 133. Sind. "isikwe."

Fairly common throughout, and even found on the ranges well within the hills, where they are, if anything, more numerous. Uncommon at Fortusher in 1908. Although sometimes nesting along the rivers with, or close to the colonies of the Red Bishop-Bird, I have noticed that this species is more frequently found breeding away from water in this district. In March I found it nesting in tall grasses near the top of Mtaba nnyama. On November 30, 1910, I noticed several males in full breeding plumage and others in transitional; whilst I have found them changing back to their winter plumage as early as the 8th of March—the majority, however, begin to show brown plumage about the middle of April. This Bishop-Bird flocks in March or April, and then resorts to the cultivated lands and, in company with Kaffir Finks, Doves, etc., seems to devote as much time as possible to the general assault on the mealies and corn.

164. *Amadina erythrocephala*. Red-headed Weaver-Finch.

This Weaver-Finch is a bird which I have seldom seen here, and it will probably prove uncommon. Its ally—*A. fasciata*, which occurs at Bulawayo—may also be found, as I believe I saw an individual at the Kimono Mine in November 1910.

165. ‡ *Pytelia melba*. Southern Red-faced Weaver-Finch.

Common within the hills and fairly numerous on the surrounding veld. On February 7, I found a pair gathering nesting material and carrying it to an old scherm at an uninhabited kraal, and later noticed it frequently gathering feathers round our kitchen.

166. ‡ *Estrilda astrild*. Common Waxbill.

The Common Waxbill is a plentiful resident in the open country—where it delights in the open grassland bordering

streams where there are rush-beds in which to roost at night—but I found it a much rarer bird in the hills. I have noticed it feeding in the mealie-lands in company with the next species, and the quantity of noxious weed-seeds which these little birds consume is incalculable.

167. *Estrilda subflava*. Orange-breasted Waxbill.

The Orange-breasted Waxbill is common, but somewhat locally distributed. Like so many of our smaller birds it is evidently double-brooded, as I shot young birds in February, when this Waxbill was found in the willow bushes along the streams in small family parties, and towards the end of March I noticed them in pairs; but it was not until the 19th and 20th of April that I found nests. Altogether I saw five nests with clutches of five eggs, two of four, and many others incomplete. A clutch of three eggs found on the 19th was on the point of hatching. All these nests were placed in rushes close to the water, except one which was built in "black jack" and ten or fifteen yards from water. This Waxbill favours the same situations as the Red Fink for nesting purposes, and builds nests of very much the same design and construction outwardly. The nest is usually attached in four separate places, and in each case is firmly bound to three or four rushes. The domed nest is composed of fairly coarse grass and lined with finer grass, and with a more or less copious addition of feathers. One which I measured was $5 \times 2\frac{3}{4}$ inches, with a round entrance $1\frac{1}{2}$ inch in diameter; whilst a second was $4\frac{1}{4} \times 3$ inches with a $1\frac{1}{4}$ inch entrance. In several nests examined, the primary lining of fine grass was left protruding from the roof of the nest through the entrance, thus forming a good porch.

When flushed, the sitting bird, almost invariably quickly followed by its mate (which is somewhere hidden close at hand, skulking in the rushes), flies away a short distance uttering a soft plaintive twitter. Some nestlings examined were very dark-skinned, and had three little patches of white down on the head, spine, and rump. It is interesting to compare this species with *Pyromelana orix* in this respect,

the Bishop-Birds having, at practically the same age, developed down as already remarked. The mouths of these nestling Waxbills are peculiarly spotted, somewhat in the same manner as those of *Ortygospiza polyzona*, except that the spots on the beak are hardly visible externally, and consist of two black, with a central white one both on the upper and lower mandible. The palate is also marked with seven blackish spots arranged three on either side with the seventh in between.

168. † *Lagonosticta brunneiceps*. Little Ruddy Waxbill.

This is a rare Waxbill with us, but I obtained one of several on February 3, 1912, on Lonsdale Farm.

169. *Lagonosticta rubricata*. South-African Ruddy Waxbill.

Another rarity, and one which I have not noticed. Mr. Chubb, however, records it from Mt. Silozi (Proc. Rhodesia Sci. Assoc. 1908, p. 62) with the remark:—"This example is quite young, and judging from this it seems probable that this species breeds here."

170. † *Lagonosticta jamesoni*. Jameson's Ruddy Waxbill.

Common within the hills, frequenting the bases of kopjes, but far less numerous in the open country. On the 24th of March I shot one—an adult male—which had the bill suffused with pinkish.

171. *Ortygospiza polyzona*. Quail-Finch.

This little bird is common on the open grasslands adjoining the north end of the hills, but is less numerous in other localities. Sometimes it is found amid rocks in the streambeds, but it does not occur within the hills. I found nests towards the end of March and throughout April, and four eggs seem to be the usual clutch, although five are not uncommon. The eggs are pure white, and my series show a maximum of 14.50 and a minimum of 13.75 × 10.50 mm. The nest is placed in a tuft of grass, is slightly domed, constructed of very coarse dry grass and copiously lined with feathers. Some nests examined were made of similar

materials, though not nearly so substantially built, but occasionally a lot of trouble is taken, and a complete dome is added. The sitting bird leaves the nest at the last moment, and the native "piccanins" sometimes catch the bird with their hands on account of this. Nestlings examined had greyish down on the dorsal tract and head only, and were peculiarly spotted along the commissure just in front of the gape. These markings consisted of a black line with two most conspicuous pure white spots along the side of the maxilla, and two black spots below on the edge of the mandible. An idiosyncrasy noted is that, whereas equal facilities are offered in the neighbourhood in the way of red and black soil, it is almost invariably the latter which is chosen for the site of the nest. Out of some dozens of nests found, only one was placed on red soil, and in one case I noticed two nests close together in a very restricted, isolated piece of black ground! Late in May I found this Weaver-Finch flocked with Smith's Lark in great numbers.

172. † *Uræginthus angolensis*. Blue-breasted Waxbill.

Estrilda angolensis (Linn.); *Sci.* i. p. 102.

Not uncommon on the surrounding veld, and more numerous within the hills. In February, I found a nest about seven feet from the ground in an "umqogolo" tree, but as a rule the site usually chosen is an "isinga."

173. † *Uræginthus granatinus*. Violet-eared Waxbill.

Estrilda granatina (Linn.); *Sci.* i. p. 104.

Somewhat uncommon, and I noticed it principally in the "maqqa" country and foot-hills.

174. *Hypochera funerea*. Black Widow-Finch.

This is a rare bird with us, but I obtained a male (lacking white patches on the back) in breeding-plumage on the 4th of March, 1912, close to Matjanoyoni kopje. This bird, so far as I could determine, was unattended by any little brown mates. From the very glossy plumage it was evidently referable to *H. nigerrima* Sharpe. On the other hand, birds which I have shot on the Bulawayo commonage were duller and decidedly of the present species.

175. *Vidua serena*. Pin-tailed Widow-Bird.

Vidua principalis (Linn.); *Scl.* i. p. 145.

Not uncommon during the breeding season, and usually to be found in the vicinity of cattle kraals and native villages. I have noticed males in breeding plumage as early as November 30, and as late as the first week in April, 1912.

176. † *Tetrænura regia*. Shaft-tailed Widow-Bird.

Vidua regia (Linn.); *Scl.* i. p. 148.

Sind. "intiga"; a term also applied to other small birds.

Rather uncommon and local. A male with some ten or twelve dusky followers frequented the homestead for some weeks in February and March, but in spite of diligent searches their nests remained undiscovered. It is possible, however, that this species shares the parasitical habits of the last named.

177. † *Steganura paradisea*. Paradise Widow-Bird.

Vidua paradisea (Linn.); *Scl.* i. p. 149.

Sind. "isapunda"; "isagbuli" is also sometimes used, but this term is really the Zulu name for *Coliopasser procne*, which does not occur here.

Uncommon, and locally distributed. It is very common in Bulawayo and often seen with as many as fifty brown mates, but in the Matopos I have only noticed the cock followed by two or three wives. I have seen males which have lost their longest rectrices at the end of March, but the majority generally shed these feathers about a month later.

178. † *Passer motitensis*. Greater South-African Sparrow.

A rare and shy bird. I met with several in trees on the top of Matjanoyoni on February 7, 1912.

179. † *Poliospiza angolensis*. Black-throated Seed-eater.

Serinus angolensis (Gmel.); *Scl.* i. p. 178.

Fairly common and resident throughout.

180. † *Poliospiza gularis*. Streaky-headed Seed-eater.

Very common throughout; it is almost as destructive as the Bishop-Birds to "amabele." At other times this Seed-eater frequents the open grasslands in the morning and evening, but retires to the shelter of trees during the heat of the day.

181. *Serinus sulphuratus*. Large Yellow Seed-eater.

Not uncommon, and frequently to be seen in either the Dam or Terminus Hotel gardens. In winter they congregate with other species in the stubbles.

182. *Serinus marshalli*. Golden Seed-eater.

Serinus marshalli Shelley; Sclater, Annals S. A. Mus. iii. 1905, p. 313.

The Golden Seed-eater is a rare bird, but I obtained a male and female on the cleared ground in front of a hut in January 1912.

183. † *Serinus icterus*. Icterine Seed-eater.

Sind. "intaga" (also applied to *Tetraenura regia* and other small birds).

Common and resident throughout. These little Seed-eaters are found in numbers in the open country, where they frequent the natives' lands and vicinage of kraals; at other times they are to be found at the tops of kopjes, swinging in the uppermost branches of small trees, and uttering their pretty song. In winter they commonly intermingle with Waxbills, Bishop-Birds, and Finches, and are then to be found in the stubbles, diligently hunting for small seeds, which form their principal food. I found nests in March and April (flocks of the species being noticed at the same time), and the site chosen generally is the fork of an "isinga," but exceptionally the nest is placed in an "umqogolo," "umkomatsana," or even an "mtokwe." One nest examined was made of dry grass, fine twigs, grass seeds, and a few small green leaves; the whole spun round and matted along the edge with vegetable down and spiders' webs; it was lined with shredded fibre and an extra lining of very fine

grass in the bottom. The nest was circular and cup-shaped ; over-all diameter $2\frac{1}{4}$ inches ; over-all depth 2 inches, and inside depth $1\frac{1}{8}$ inches. This nest was placed in an *Olax dissitiflora* and the surrounding leaves were attached to the exterior, making the whole structure extremely hard to detect. Other nests were very similar and protectively decorated with lichen and spiders' webs, and as a rule situated nine or ten feet from the ground, but occasionally as low as three feet six inches. The nestlings, at first covered with yellowish down, are fed on insects ; and by the time they are fledged their home becomes very dirty. The eggs are two or three in number and are of a very pale bluish ground-colour spotted with pale brown.

184. *Anomalospiza imberbis*. Rendall's Seed-eater.

Serinus imberbis rendalli (Cab.) ; *Scl.* i. p. 172.

I shot a male on January 15, 1911, in the Terminus Hotel grounds. Iris brown ; bill dusky ; legs and feet dusky-brown. The stomach contained small seeds and remains of insects.

185. ‡ *Emberiza flaviventris*. Golden-breasted Bunting.

The Golden-breasted Bunting is not uncommon in the open country, but is far more numerous within the hills.

186. *Fringillaria capensis media*. Deelfontein Bunting.

Fringillaria capensis media (Sharpe) ; *Sclater, Annals S. A. Mus.* iii. 1905, p. 314.

A common species during the summer, frequenting the kopjes and foothills, but, in common with the next species, evidently partially migratory, as I seldom noticed it during the dry season.

187. ‡ *Fringillaria tahapisi*. Rock-Bunting.

Very common in the hills, open veld, and "maqaqa" country during the wet season, but far rarer later. I found a nest on April 1 containing three nestlings with tufts of dark grey down on the head, dorsal and forearm tracts ; the nest was made of coarse grass, copiously lined with finer, and placed under a tussock of grass on the top of a high river-bank.

188. † *Motacilla capensis*. Cape Wagtail.

Resident in small numbers and frequenting all suitable localities, being most numerous in the valleys within the hills.

189. † *Motacilla vidua*. African Pied Wagtail.

On November 20, 1910, I saw a couple on the Umzingwani River, between Fortusher and the Northern Star Mine.

190. *Budytes* sp.

I have twice noticed Yellow Wagtails during the autumn, and they were probably referable to *B. flava* Linn.

191. *Anthus trivialis*. Tree-Pipit.

The Tree-Pipit occurred in small numbers during the summer of 1912, and it will probably eventually prove a regular visitant at this season.

192. † *Anthus rufulus cinnamomeus*. Tawny Pipit.

Anthus rufulus Vieill. ; ScL. i. p. 251.

Not uncommon, and resident. Within the hills it is confined to the larger valleys.

193. *Anthus leucophrys*. Plain-backed Pipit.

Anthus pyrrhonotus (Vieill.) ; ScL. i. p. 250.

This Pipit, although I have not noticed it a great deal, is probably not uncommon. I did not, however, observe it within the hills.

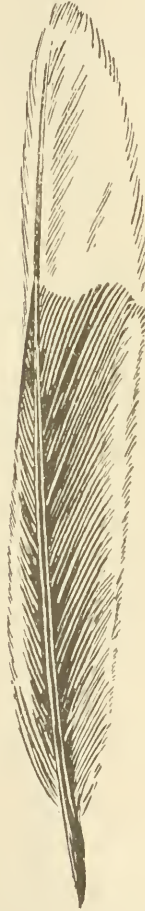
194. *Macronyx capensis*. Cape Longclaw.

Sind. "ligwenshi."

Common in the open country to the north of the hills, but I have not noticed it elsewhere. This Longclaw perches on bushes, trees, or rocks indiscriminately ; in flight, the white-tipped rectrices are very conspicuous. The female sits closely, and I have known bird, nest, and eggs cut to pieces when hay is being cut. A male shot on the 6th of February measured: length 183 mm. ; wing 95 ; tail 69 ; tarsus 30.5 ; culmen 16.5. This bird, apparently fully adult, differed from the typical form insomuch that in the outer rectrices the outer web was not wholly white (see text-figure 8).

The bill in this specimen, and all others which I have examined, was not dark brown, as described by Selater, but had the upper mandible blackish-horn and the lower bluish-

Text-figure 8.



Outer tail-feather of *Macronyx capensis*.

horn merging into blackish brown towards the tip; commissure and gape bluish-horn also. The underparts of the feet are dirty orange-yellow. These Longclaws are generally infested with ticks around their auditory orifices.

195. *Mirafra sabota*. Sabota Lark.

This Lark is a rare bird with us, but I have obtained specimens at the Dam Hotel, whilst I have also noticed it close to Figtree.

196. † *Mirafra africana*. Rufous-naped Lark.

Sind. "incwelo."

Fairly common, but I did not notice it within the hills. On January 19 I found a nest containing two eggs; the nest was typical and placed in a natural hollow under a tussock of grass.

197. *Pinarocorys nigricans*. Dusky Lark.

Mirafra nigricans (Sund.); *Scl.* i. p. 207.

I saw this Pipit-like Lark in small numbers on the fringes of the Matopos in 1912, but it is decidedly a rare bird and does not seem to penetrate the hills to any extent.

198. † *Pyrrhulanda leucotis smithi*. Smith's Lark.

Pyrrhulanda smithi (Bp.); *Scl.* i. p. 196.

Common and resident throughout the open country from Bulawayo, through the Dam and across to Figtree, but not occurring in the hills. At times this Lark is subject to considerable movements. In January I noticed them in pairs, and they breed in March and April, whilst they flock about the middle of May, and are then sometimes to be found in the company of Quail-Finches and other small birds on the open grasslands. At other times they love to frequent dusty roads, and in towns they resembled the Sparrow (*Passer domesticus*) in this respect, except that they do not resort to buildings. On the 20th of March, whilst breaking up an area on the open grasslands, I found a nest containing two eggs. The nest was situated in a hollow to the sheltered side of a tuft of grass, and, owing to the irregular shape of the nest and close assimilation of the materials and eggs to the surroundings, was an excellent example of protective coloration in this direction. The male participates in sitting. When flushed, the bird was silent and simply circled round at some height and settled on the

ploughed land in the vicinity. The nest was composed of dry grass-blades and was fairly substantial. The eggs were fresh, of a greyish-white freckled all over with brown, and measured 20×14.5 mm. Another nest, found on the 17th of April, also contained two similar eggs, at an advanced stage of incubation, but measuring 19.5×15 mm. The nest, however, was made of coarse dry grass at the bottom and built up with brown vegetable fibre, with a little finer grass in the cup. The male (sitting) bird in this case was also undemonstrative. This Lark does not nest in the thick grass, preferring the barer situations.

199. *Calandrella cinerea*. Red-capped Lark.

Tephrocorys cinerea (Gmel.); *Scl.* i. p. 222.

Sind. "toli."

The Lark in question, which I am almost sure is referable to this species, occurs commonly in flocks during the summer months on the surrounding veld, but does not penetrate within the hills. It is to be found in small flocks of about twenty, which frequent the more open lands (more or less free from grass) and are generally to be found in old mealic-lands. This Lark runs fast, and very closely agrees in coloration with the red soil, which it seems to prefer to the black. I have, however, noticed it on freshly ploughed black soil; but it is amongst the stubbles that it is usually to be found: here, owing to the remarkably close assimilation of their plumage to the surroundings, they are exceedingly difficult to detect until they fly—when one's attention is immediately drawn by the invariable call. On April 15 I met with a very large flock, probably of several thousands, on open ground in the neighbourhood of Ross's Huts, but about a month later the flock appeared to break up, and towards the end of May I noticed the birds pairing and evidently about to nest. These Larks often drink at midday during the hot and close weather. It is rather a pugnacious species, and I have seen individuals darting up and chasing Swallows, when the latter flew by skimming the ground. A

male shot on February 5 tallies with Sclater's description of the present species with the exception of its tail; this was blackish with the two central rectrices emarginated with buffish and the two outermost feathers (outer webs buffish) shading to white at their extreme edges. The median wing-coverts were also blackish with broad rufous tips. These Larks appear almost referable to *Tephrocorys anderssoni* (Sel. i. p. 224), but the under tail-coverts were white. Iris hazel; bill pinkish-horn, lighter below; feet pinkish-brown. Length 145 mm.; wing 85; tail 55; tarsus 20; culmen 12.5.

200. *Phyllastrephus strepitans*. Reichenow's Bristle-necked Bulbul.

This Bulbul is an uncommon species and confined to the hills, where I first noticed it on the Mawa Range in June 1912. Later I came across it on several occasions whilst stalking fugitive klipspringer, and on such occasions, the rustling noise which these birds make when turning over leaves in a thrush-like manner, has more than once deceived me as to the proximity of the buck. In their habits they closely resemble Thrushes, but are silent to a great degree, although when startled they resort to the trees uttering a loud note somewhat resembling that of *Crateropus jardinei*. There is also another species which I have failed to identify. It differs from *P. strepitans* in having the underside, including the under tail-coverts, white throughout, with the exception of the sides of the under tail-coverts or base of the rectrices, which are rufescent.

201. ‡ *Pycnonotus barbatus layardi*. Black-cap Bulbul.

Pycnonotus layardi Gurn.; Sel. ii. p. 63.

Sind. "ipoti" or "igiko."

This species is common throughout and extremely numerous within the hills, where it is also probably one of the most noticeable of birds. Whilst at Fortusher I found this Bulbul plentiful and very tame, coming on to the verandas morning and evening.

202. *Zosterops anderssoni*. Andersson's White-eye.

I only met with this White-eye during June 1912, when parties were to be found in the "isiqwalapa." On one occasion (I did not procure a specimen), from a short distance the eye-ring appeared to me to be distinctly yellow!

203. † *Chalcomitra gutturalis*. Scarlet-breasted Sunbird.

Cinnyris gutturalis (Linn.); *Sci. i.* p. 286.

Sind. (?) "matungasweswi," a term also applied to other species.

Common at times; but, except in such places as the Hotel gardens, never numerous. On the open veld it is practically always found in the "mimosa" scrub, or where there is flowering vegetation. Both sexes have a very sparrow-like chirp.

204. † *Cinnyris leucogaster*. White-breasted Sunbird.

The White-breasted Sunbird is very rare, and I have only met with it on one or two occasions. According to my notes, its occurrence is confined to the hills between Fortusher and the Mission Station.

205. † *Cinnyris mariquensis*. Southern Bifasciated Sunbird.

Not uncommon; but in common with all other Sunbirds, subject to a great deal of local movement and but rarely met with during the colder months.

206. † *Cinnyris chalybeus*. Lesser Double-collared Sunbird.

This is probably the commonest of the Sunbirds within the hills, and is especially in evidence amongst the "isiqwalapa." I have noticed it feeding in company with White-eyes.

207. † *Parus cinerascens*. Grey Titmouse.

Parus afer Gmel.; *Sci. i.* p. 305.

The Grey Tit (grey above and below) is uncommon, but I met with it on Lucydale in January and May. This species was included in my Mangwe notes under the misnomer *P. afer*.

208. ‡ *Parisoma subcæruleum*. Tit-Babbler.

The little Red-vented Tit-Babbler is at times quite plentiful. On March 1, a sudden incursion of these birds was perceptible (I had not seen them earlier), and they remained throughout June.

209. ‡ *Anthoscopus caroli*. Andersson's Penduline Tit-mouse.

On January 17, I noticed a party in the gardens of the Terminus Hotel.

210. *Cisticola subruficapilla*. Grey-backed Grass-Warbler.

Not uncommon but local. On February 12, I found a nest containing three eggs placed about two inches from the ground in a small shrub amid grass—"white-ants" had practically enveloped the structure. On the 16th, two eggs had hatched out, but on the 24th there was only one young one and an addled egg, whilst the nest had been opened at the top—evidently to facilitate the feeding of the young ones. Eggs white, with a few red spots all over, but denser at the obtuse end.

211. *Cisticola natalensis*. Natal Grass-Warbler.

This is a rare bird with us, but I have occasionally noticed it in the rank herbage and long grass along the Malemi and elsewhere, whilst it may sometimes be seen perched on a tree or rock uttering its jerky call. It has been recorded by Chubb from Mt. Silozi, and there is little doubt that it will ultimately be proved a resident with us.

212. *Cisticola terrestris*. Wren Grass-Warbler.

Common in places, but inclined to be local.

213. *Cisticola* sp.

On February 8, 1912, I shot a Grass-Warbler which had the crown and nape rufescent brown, deepest on the forehead, lores white which was continued over the eyes and above the ear-coverts, where, however, it was tinged with reddish; ear-coverts like the crown; the feathers on the back dark brown with bluish-grey edges, the brown centres becoming less distinct on the rump; upper tail-coverts

sandy-brown; tail, with the exception of the central rectrices, rufous with broad black bands (7 mm.) towards the tips, and tipped with rufous fading to buff; central rectrices—very much frayed in the specimen—a duller brown with only traces of the black bands at extreme end. Wings brown with lighter edges most noticeable on the secondaries and inner greater coverts; edge of wing whitish; lesser wing-coverts and scapulars showing traces of the bluish-grey edging present on the back. Chin, throat, and cheeks white; breast, flanks, and abdomen white, with a faint wash of sandy-buff; thighs pale rufous; under tail-coverts sandy-buff; under wing-coverts pale brown, becoming slightly rufous lower; upper axillaries white, and lower pale brown. Irides brownish yellow; bill black (bluish-horn on gonyes, commissure black); legs and feet flesh-coloured. Length 126 mm.; wing 55; tail 52.75; tarsus 19.50; culmen 12.

I believe *Schœnicola apicalis* Cab. occurs, but have been unable to procure specimens.

214. *Acrocephalus palustris*. Marsh-Warbler.

During the summer of 1912 I obtained two examples of the Marsh-Warbler, but they were both in much abraded plumage. These birds occurred in a thick crop of "amabele" growing alongside water on Lucydale, but whether the species is a regular annual visitor I cannot say.

215. *Acrocephalus bæticatus*. African Reed-Warbler.

Common on Lucydale during the summer, and also noticed on the Malemi River within the hills in August. A male shot on February 5 measured 126 mm.; wing 63; tail 49; tarsus 23.5; culmen 13. The stomach contained minute Coleoptera and Culicidæ.

216. *Prinia mystacea*. Tawny-flanked Wren-Warbler.

Fairly common, but inclined to be local.

217. † *Prinia flavicans*. Black-chested Wren-Warbler.

Common, especially on the surrounding veld. A nest examined on March 1, was placed in a "Milk-bush" situated

on the open stony ground, and contained three eggs. The nest was typically shaped and suspended from leaves into a fork of bush, and was held to the stem in two places; in the case of the leaves it was attached by ribbons passing through the leaves—the necessary holes having been evidently made by the bird's bill. The nest was composed of fine grass, twisted and woven together and lined with very fine grass and vegetable down. Later in the year, I saw several family parties of young and old, evidently of this species, but all with pectoral bands (normally the young lack the dark chest-bands), but unfortunately I was not in a position to obtain a specimen.

218. *Apalis thoracica*. Bar-throated Wren-Warbler.

This little Wren-Warbler is, according to my observations, confined to the hills, where it is rather numerous. As a rule they frequent the larger trees, such as the "umkuna," but are often found assiduously examining "isiqwalapa" and "isinga." Our birds are of a smaller race than the southern ones, but I do not think sub-specifically distinct.

219. *Camaroptera griseoviridis sundevalli*. Grey-backed Bush-Warbler.

Camaroptera sundevalli Sharpe; *Sci.* ii. p. 113.

Uncommon and local, but I obtained specimens in March and April in the "maqaqa" country on Lonsdale farm, whilst I believe I have also seen it at Figtree Camp.

220. † *Sylvietta rufescens*. Crombec.

Resident and fairly common throughout. These little Warblers have a peculiar habit of stiffening their necks and bobbing their heads up and down when uttering their somewhat plaintive call. A nest found on March 24 was placed in an "isinga" and the young had just flown.

221. *Eremomela flaviventris*. Yellow-bellied Bush-Warbler.

This little Warbler is rare with us, but may be looked for

in the uppermost branches of the larger timber close to water. A locality where I noticed the species several times, is on the Malemi River below the Mshingili-Malamba Gorge.

222. †*Phylloscopus trochilus*. Willow-Wren.

An uncommon summer visitor, but I have noticed it here and there practically throughout the district. The Willow-Wren leaves for northern climes towards the middle of March. In November (shortly after their arrival), I have heard them singing—albeit half-heartedly.

223. *Sylvia sylvia*. Common Whitethroat.

Sylvia cinerea Bechst.; *Syl.* ii. p. 81.

Noticed in the "mimosa" scrub throughout February and March on the slopes rising to the Zambesi-Limpopo watershed. They are evidently annual visitors, as I found to be the case at Bulawayo, but are subject to some local movement. On March 24, I noticed larger numbers than usual—possible arrivals from the south on migration—and they were evidently fatigued, as they were exceedingly tame, and I even touched one with the barrel of my collecting gun, as it sat crouching ridiculously against a branch near the top of a low stunted "isinga." The latest date on which I met with the Whitethroat was March 30.

224. *Sylvia nisoria*. Barred Warbler.

The Barred Warbler occurred again in 1912 (*vide* Annals Transvaal Museum, iii. 1911, p. 109—specimen shot at Bulawayo, 1911) in January and February, and it would therefore seem that there is a probability that it is a regular annual visitor to Southern Rhodesia. Seebohm (*Cat. Brit. Mus.*) states that it probably winters in central Africa, but, as now it has been recorded from Rhodesia, and the Transvaal Museum possesses a specimen from Potchefstroom, southern Africa should be included within its range. All three specimens which I procured (including the Bulawayo bird) were in immature plumage.

225. † *Crateropus jardinei*. Jardine's Babbler.

I am not sure whether Kirk's Babbler (*C. jardinei kirki*) occurs or not, but some of these Babblers which I have seen have appeared to be too small for the present species. Jardine's Babbler in the Matopo District is confined to the hills, where it delights in thickly wooded kloofs and kopjesides.

226. *Pinarornis rhodesiæ*. Rhodesian Chat-Warbler.

Pinarornis rhodesiæ E. C. Chubb, Bull. B. O. C. xxi. 1908, p. 110.

Although occurring on Mtaba mhlope and Mtaba manyama, the Rhodesian Chat-Warbler is essentially a bird of the hills and remote ranges, where it is very common, and in fact one of the most striking of our birds. I have watched these Chats for hours at periods over several months, but have failed in the attempt to find out anything about their nidification, and can only assume that they nest in clefts and crannies in very inaccessible places. They are almost invariably found in pairs, and they are equally at home on the ground (where a great deal of their insectivorous food is obtained), on trees, or on rocks; but all the same, they are never found at any distance from rocky situations, as it is amid such surroundings that they love to skulk and hide. Their flight is fairly strong but not generally protracted, whilst the loose and fluffy plumage imparts a singular gracefulness to their every movement. Although these Chats are often noticeably silent, they have a variety of notes, some of which are quite musical. The female appears to me to be browner than her mate, and is readily distinguishable at some distance.

227. † *Geocichla litsipsirupa*. Ground-scraper Thrush.

Turdus litsipsirupa (Smith); ScL. ii. p. 173.

Strange to say I only met with this Thrush once—on March 30, when I saw several in tall trees close to a "dwala."

228. *Turdus libonyanus*. Kurrichane Thrush.

Only seen within the hills, where I noticed several in May, June, and August, at Mawa and other ranges.

229. † *Thamnodæa cinnamomeiventris*. White-shouldered Bush-Chat.

Very common on, and in the neighbourhood of, the larger kopjes, and found throughout the hills. These birds often feed on the ground, but when disturbed invariably repair to rocks, on which they are greatly at home. When perched on bald boulders the wings are often partially extended and used as a prop, in the same manner as the Woodpecker uses its tail. The male is by no means a bad songster, and may frequently be heard pouring forth its melody, from the top of some rock, whilst it is also a clever mimic.

I have on more than one occasion taken ticks from the auditory orifices of specimens shot.

230. † *Saxicola pileata*. Capped Wheatear.

Sind. "inqawana."

Noticed rather commonly at Fortusher in 1908, and later I found it occurring on the surrounding veld all round the hills. Specimens which I shot, in common with all the birds which I have handled in Matabeleland, measured under 150 mm. The young bird, besides being duller in tone, has the chest-band represented by a few dark mottlings. These Wheatears are usually infested with ticks.

231. † *Pratincola torquata*. South-African Stonechat.

The Stonechat is rather a local species, but occurs commonly in the larger valleys of the hills. I found it principally along the Malemi River and in Matondo's Valley.

232. *Cossypha humeralis*. White-shouldered Robin-Chat.

On June 21, 1912, I obtained a specimen of this rare greyish Chat on Makalanyoni, but I did not meet with it elsewhere. Iris hazel; bill blackish; legs and feet dark brown.

233. *Cossypha caffra*. Cape Robin-Chat.

The Cape Robin-Chat occurred in August, but I only noticed it in one locality—a densely wooded kloof on the Inengwi Range. It is a shy species, and very apt to be overlooked, and possibly, in common with the last named, may prove more numerous than anticipated upon further research.

234. *Cossypha heuglini*. Heuglin's Robin-Chat.

These Robin-Chats are easily our best songsters, but one must be up early in the morning to hear their melodious babbling notes and modulated song; shortly after sunrise they become silent, and spend the remainder of the day skulking through the denser bush around the kopje-bases.

235. *Erythropygia leucophrys*. White-browed Ground-Robin.

This Ground-Robin is an uncommon species, occurring principally in the open country and foot-hills. As I have already remarked, I found this bird the host of the South African Cuckoo.

236. *Erythropygia pæna*. Smith's Ground-Robin.

On January 21 I met with this species in the gardens of the Terminus Hotel, but I never saw it again.

I believe *Tarsiger stellatus* Vieill. occurs within the hills, but have been unable to procure specimens of the bird in question.

237. *Phœnicurus familiaris*. Familiar Chat.

Saxicola familiaris Steph.; Scl. ii. p. 201.

The Familiar Chat is resident and plentiful throughout. Whilst at Fortusher, these birds, in company with Bulbuls, used to frequent the verandas and sometimes even venture inside the huts. Three eggs, taken from a nest under the roof of a hut, were a beautiful bright blue, with a confluent zone of reddish towards the obtuse end.